# REPORTING CONTINUOUS RELEASES of Hazardous and Extremely Hazardous Substances under CERCLA and EPCRA



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Prepared by

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(formerly the Office of Environmental Guidance)

RCRA/CERCLA DIVISION

(EH-231)

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Technical support by

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# memorandum

**DATE:** January 3, 1995

REPLY TO

ATTN OF: Office of Environmental Policy and Assistance (EH-231): DiCerbo:6-5047

SUBJECT: Reporting Continuous Releases under CERCLA and EPCRA

TO: Distribution

The purpose of this memorandum is to provide Program Offices and Field Organizations with a copy of an environmental guidance document entitled: "Reporting Continuous Releases of Hazardous and Extremely Hazardous Substances under CERCLA and EPCRA." This guidance was developed by the Office of Environmental Policy and Assistance (formerly the Office of Environmental Guidance), RCRA/CERCLA Division (EH-231) for Departmental personnel with line management or oversight responsibilities relative to notification and reporting requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Pursuant to Section 103 of CERCLA, facilities that release hazardous substances (listed in 40 CFR Part 302.4) into the environment in amounts equal to or greater than their designated reportable quantity (RQ) must notify the National Response Center (NRC) for each occurrence. Additionally, under the Emergency Planning and Community Right-to-Know Act (EPCRA), reporting to local authorities as well as the NRC is required for each RQ release occurrence of a CERCLA hazardous substances and EPCRA extremely hazardous substances (40 CFR Part 355). However, Section 103(f)(2) of CERCLA provides relief from select reporting requirements if the release meets certain criteria that qualify it as a *continuous release*. For a release to be continuous, it must be "continuous" and "stable in quantity and rate." By offering this relief, facilities that have continuous releases as part of normal operating procedure will not be faced with the burden of notifying the authorities each time a RQ is released.

The approach taken in this guidance is graphic in nature, utilizing tables, flowcharts, and checklists to provide a "road map" of the CERCLA continuous release provisions. Pertinent information is presented in a clear, accessible manner through the use of a modular format and structure that allows the user to focus efficiently and effectively on particular notification and reporting provisions of interest.

Questions concerning the attached guidance document, in particular, or CERCLA notification and reporting requirements, in general, may be directed to Jerry DiCerbo of my staff at (202) 586-5047 or through the INTERNET electronic mail at Gerald.DiCerbo@hq.doe.gov.

Thomas T Traceski
Director, RCRA/CERCLA Division

Office of Environmental Policy and Assistance

Attachment

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# Acronyms

| Acronym | ronym Definition  |  |
|---------|---|--|
| AEA     | Atomic Energy Act   |  |
| CERCLA  | Comprehensive Environmental Response, Compensation, and Liability Act |  |
| CR-ERNS | S Continuous Release - Emergency Response Notification System         |  |
| CAA     | Clean Air Act   |  |
| CWA     | Clean Water Act   |  |
| DOE     | Department of Energy  |  |
| EHSs    | Extremely hazardous substances  |  |
| EPCRA   | Emergency Planning and Community Right-to-Know Act                    |  |
| LEPC    | Local Emergency Planning Committee                                    |  |
| NRC     | National Response Center  |  |
| NTIS    | National Technical Information Service                                |  |
| RCRA    | Resource Conservation and Recovery Act                                |  |
| RQ      | Reportable quantity   |  |
| SARA    | Superfund Amendments and Reauthorization Act                          |  |
| SERC    | State Emergency Response Commission                                   |  |
| SSI     | Statistically significant increase                                    |  |
| TCLP    | Toxicity Characteristic Leaching Procedure                            |  |
| TSCA    | Toxic Substance Control Act   |  |
| UMTRCA  | Uranium Mill Tailings Radiation Control Act                           |  |
|         |   |  |

# Introduction

# Background

Section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, requires that the person in charge of a facility or vessel immediately notify the National Response Center (NRC) when a release of a hazardous substance into the environment equals or exceeds its reportable quantity (RQ). In addition to the reporting requirements established by CERCLA, Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA)² requires that all releases of CERCLA hazardous substances as well as Extremely Hazardous Substances (EHSs) that equal or exceed their RQ be reported to the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) in any area likely to be affected by the release.

However, Section 103(f)(2) of CERCLA provides relief from reporting releases of CERCLA hazardous substances and EPCRA EHS if the release is a *continuous release*. A continuous release is a release that is "continuous" and "stable in quantity and rate." On July 24, 1990, the Environmental Protection Agency (EPA) published the final rule, "Reporting Continuous Releases of Hazardous Substances" (55 *FR* 30166, codified at 40 CFR 302.8 and 355.40) that implements CERCLA Section 103(f)(2) effective September 24, 1990. This regulation provided the details for reduced reporting by facilities or vessels that have continuous releases of CERCLA hazardous substances and EPCRA EHSs.

The reporting relief provided under CERCLA and the final rule apply to both the State and local notification requirements of EPCRA, as well as to the episodic release reporting requirements of CERCLA Section 103(a).

# **Purpose**

This guidance is designed to provide basic instruction to Department of Energy (DOE) and DOE operations contractor personnel on how to characterize CERCLA and EPCRA hazardous substance releases as continuous and how to prepare and deliver continuous release reports to Federal, State, and local authorities. DOE staff should use this guidance as:

| □ an overview of the continuous release requirements,                                    |  |  |  |
|--|--|--|--|
| □ a quick, ready reference guide for specific topics concerning continuous releases, and |  |  |  |
| □ a step-by-step guide for the process of identifying and reporting continuous releases. |  |  |  |

The final rule (codified at 40 CFR 302.4) implementing Section 103(f)(2) sets forth the procedure for reporting continuous releases and clarifies a number of issues. First, the rule emphasizes that such releases are not federally permitted; second, continuous releases are not necessarily free of risk to human health; third, other provisions of CERCLA may apply even where notification is not required. For example, a party responsible for the release of a CERCLA hazardous substance that is not a federally permitted release is liable for the costs of cleaning up that release and for any natural resource damages, even if the release is not subject to the

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq. 2 Title III of the Superfund Amendments and Reauthorization Act (SARA), 42 U.S.C. 11001 et seq.

CERCLA notification requirements. Similarly, DOE is still liable for cleanup costs under CERCLA Section 107, even if DOE properly reports a release according to CERCLA's notification requirements. Finally, all releases of CERCLA hazardous substances, (including federally permitted releases), may be subject to liability provisions of State statutes, common law, and Federal statutes other than CERCLA. Users of this guidance should comply with other required reporting procedures, in addition to those of CERCLA and EPCRA, immediatey upon discovery of a release.

# **Submitting Reports**

EPA recommends that the written reports discussed below be generated using the Continuous Release—Emergency Response Notification System (CR-ERNS) software package<sup>3</sup> and the associated user's manual. While the guidance presented here explains the entire scope of the reporting process, the software package allows DOE to quickly and easily prepare individual reports in a standard format. To obtain a copy of the diskette and the user's manual, call the National Technical Information Service (NTIS) at (703) 487-4600. The document number is PB 91509935.

## Organization of this Guidance

Unlike the typical narrative style, the approach taken in this guidance combines both flowcharts and narrative style to provide a "road map" of the continuous release requirements. Pertinent information is presented in a simple, direct, and easily understood way. This "graphic" guidance, with its modular format and structure allows the user to focus efficiently and effectively on those particular aspects of the continuous release regulations that are of interest, Each chapter contains: (1) introductory text, (2) a flowchart that brings the reader through the reporting requirements discussed in the chapter, and (3) a step-by-step explanation of the elements in the flowchart All of the flowcharts, together with their associated text, comprise the entire process of reporting continuous releases of hazardous and extremely hazardous substances.

There are seven chapters in this Guidance. Each chapter discusses the applicability of certain regulatory requirements to any given release or provides instruction for specific regulatory requirements. For convenience, a schematic of the flowcharts (Figure 1) is presented on the facing page. The following outline briefly describes each chapter.

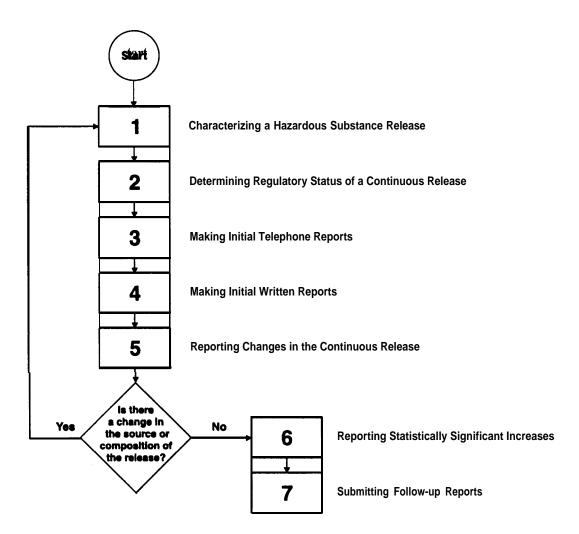
- □ Chapter 1: Characterizing a Continuous Release. This chapter guides the user to a determination of whether or not a release is a continuous release [CERCLA Section 103(f)(2), 40 CFR 302.8].
- □ Chapter 2: Determining the Regulatory Status of a Continuous Release. Chapter 2 identifies which reporting requirements apply to a release [40 CFR 302.4, 40 CFR 355.40].

<sup>3</sup> CR-ERNS Version vi 1.01 A IBM-compatible diskette, OSWER Directive 9360.7-02, October 1990.

<sup>4</sup> Continuous Release—Emergency Response Notification System; User's Manual for Industry, U.S. EPA Office of Emergency and Remedial Response, EPA/540/G-91/005, March 1991.

- □ *Chapter 3: Making Initial Telephone Reports.* This chapter provides general instructions on making a telephone report to the NRC and/or the SERC and LEPC for continuous releases of hazardous substances [40 CFR 302.8(d)].
- □ *Chapter 4: Making Initial Written Reports.* Chapter 4 gives general guidance on submitting a written report to the EPA Region and/or the SERC and LEPC [40 CFR 302.8(e)],
- ☐ Chapter 5: Reporting Changes in the Continuous Release. This chapter describes how changes in the continuous release must be reported to Federal and State authorities [40 CFR 302.8(g)].
- ☐ Chapter 6: Reporting Statistically Significant Increases (SSI). This chapter describes additional reporting requirements associated with increases in the continuous release above its normal range [40 CFR 302.8(g)(2)].
- □ *Chapter 7: Submitting Follow-up Reports.* This chapter outlines follow-up activities related to the continuous release including reassessment of the release and submission of the follow-up report one year later [40 CFR 302.8(f)].

Figure 1. Flowcharts used in this guidance document.



# 1.0 Characterizing a Continuous Release

#### 1.1 Introduction

Any release of a hazardous substance from a DOE facility that equals or exceeds an RQ within a 24-hour period must be reported to the National Response Center (NRC), regardless of whether the release occurs during normal operations, treatment processes, remediation, or corrective actions. However, Section 103(f)(2) of CERCLA states that "continuous releases" of hazardous substances that equal or exceed their RQ over a 24-hour period may be reported less frequently than would otherwise be required. There are several components to the definition of a continuous *release*, each of which is discussed in this chapter. In addition, definitions of *hazardous substance*, *extremely hazardous substance*, and *release* are provided.

#### 1.2 What Is a Hazardous Substance?

Section 101 (14) of CERCLA defines the term *hazardous substance* by reference to other environmental statutes and gives EPA authority to designate additional hazardous substances under authority of CERCLA Section 102(a). CERCLA hazardous substances and their RQs are designated and listed in 40 CFR 302.4. Also, characteristic wastes regulated under RCRA (i.e., wastes that exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity, as those terms are defined in 40 CFR 261.20-261.24) are CERCLA hazardous substances even though they are not specifically listed in 40 CFR 302.4. CERCLA hazardous substances include:

| ☐ any elements, compounds, mixtures, solutions, or substances designated by EPA under CERCLA Section 102;                        |
|--|
| ☐ any toxic pollutants subject to Section 307(a) of the Clean Water Act (CWA) (listed at 40 CFR 401.15);                         |
| ☐ any hazardous substances regulated under Section 311(b)(2)(A) of the CWA (listed at 40 CFR 116.4);                             |
| ☐ any listed or characteristic hazardous wastes under the Resource Conservation and Recovery Act (RCRA);                         |
| ☐ any hazardous air pollutants subject to Section 112 of the Clean Air Act (CAA); or   |
| ☐ any imminently hazardous chemical substances or mixtures regulated under Section 7 of the Toxic Substances Control Act (TSCA). |

# 1.3 Are Extremely Hazardous Substances also Hazardous Substances?

Subtitle A of EPCRA provides the structure for emergency response planning and release notification for a listed group of 360 "extremely hazardous substances" (EHSs). EHSs, along with their respective RQs, are listed in 40 CFR 355 Appendices A and B. The CERCLA hazardous substances list and the EPCRA EHSs list are not identical but they do overlap. Of the 360 substances on the EHSs list, 232 are *not* CERCLA hazardous substances. EHSs that are also

<sup>5 40</sup> CFR 355.

CERCLA hazardous substances are listed in both Table 302.4 of 40 CFR 302.4 and Appendices A and B of 40 CFR 355.

### 1.4 What Constitutes a Release under CERCLA and EPCRA?

In CERCLA Section 101(22), "release" is defined as "...any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous substance or pollutant or contaminant)," For notification purposes under CERCLA the term does not include:

| engine exhaust emissions;  |
|--|
| certain releases of source, by-product, or special nuclear material from a nuclear incident; |
| normal applications of fertilizer;   |
| consumer products in consumer use; and   |
| federally permitted releases. <sup>6</sup>   |

#### 1.5 What Are Releases into the Environment?

Releases are reportable under CERCLA and EPCRA only if they are "into the environment." The definition of *environment* is the same under both CERCLA and EPCRA, but releases *into the environment* are reportable under EPCRA *only if* they have the potential to expose off-site populations to the hazardous substance. Releases that remain inside a facility (e.g., within an enclosed structure) are not reportable releases under CERCLA and EPCRA.

Environment is defined in Section 101(8) of CERCLA as "the navigable waters, the waters of the contiguous zone, and the ocean waters... of the United States . . . and any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air . ..."

Although certain components of the definition of environment are clear (e.g., navigable waters, waters of the contiguous zone, ocean waters, surface waters, ground water, drinking water supplies, ambient air, and subsurface strata), other components may be less clear as illustrated below.

The U.S. District Court decision in the case of *The Fertilizer Institute* v. U.S. EPA [935 F. 2d 1303 (1991)] addressed the issue of "release into the environment." The Court ruled in *The Fertilizer Institute* case that although releases into *open* containment structures maybe *potential* or threatened releases, they are not actual releases into the environment. CERCLA Section 103 requires persons in charge to report *actual* releases into the environment that equal or exceed an RQ. In its ruling the Court used the example of an open tank and stated that releases into an open tank that do not volatilize are no different from releases into a fully enclosed tank. EPA has agreed that releases into open containment structures are not releases into the environment under

See CERCLA Section 101(1 O) for the definition of federally permitted releases. See also the joint DOE/EPA, document Guidance for Federal Facilities on Release Notification under CERCLA and SARA Title III, EPA 9360.7-06, November 1990.

CERCLA, so long as the hazardous substance does not volatilize into the air or migrate into surface water, ground water, or soil.

Uncertainty arises because some land surfaces may actually be used as containment devices (e.g., clay- or synthetically-lined disposal facilities, a concrete pad, or a clay dike surrounding a tank). EPA has not yet clarified what kinds of structures are open containment devices or when they are actually part of the environment.

#### 1.6 What Is a Continuous Release?

A release is *continuous* if it occurs without interruption or abatement or if it is routine, anticipated, intermittent, and incidental to normal operations or treatment processes.' The release must also be "stable in quantity and rate," which means that it must be predictable and regular in the amount and rate of emission. Finally, notification must be given under Section 103(a) "for a period sufficient to establish the continuity, quantity, and regularity" of the release. If these conditions are met, then the release may qualify for reduced reporting under the continuous release reporting regulation. Thus, non-episodic releases of hazardous substances from DOE facilities may not need to be reported on a per-occurrence basis, but rather maybe reportable under the provisions of the continuous release reporting regulation (40 CFR 302.8).

# 1.7 Do Releases that Result from Unanticipated Events Qualify for Reduced Reporting?

CERCLA Section 103(f)(2) states that in order for a release to qualify for reduced reporting, it must be both continuous and stable in quantity and rate. If either one of these conditions is not met, then the release does not qualify for reduced reporting as a continuous release under CERCLA Section lo. Therefore, unanticipated releases do not generally qualify for reduced reporting. However, some releases resulting from malfunctions may qualify for reduced reporting as a continuous release to the extent that they are incidental to normal operations or otherwise fit the definition of a continuous release. EPA points out (55 FR 30171) that releases from a leaking valve or pump seal, for example, might qualify for reduced reporting if the leak was continuous during certain processes and occurred with regularity and predictability (e.g., the leak may occur predictably as a function of pressure on the system). EPA was unable to define releases from malfunctions with sufficient precision in the final continuous release reporting regulation to specify, by definition alone, whether they qualify for reduced reporting under Section 103(f)(2). Determinations about specific releases must be based on professional judgment and knowledge of the operating history of the facility.

### 1.8 Flowchart 1

The following flowchart is intended to assist in the determination of whether a release is a *continuous release*.

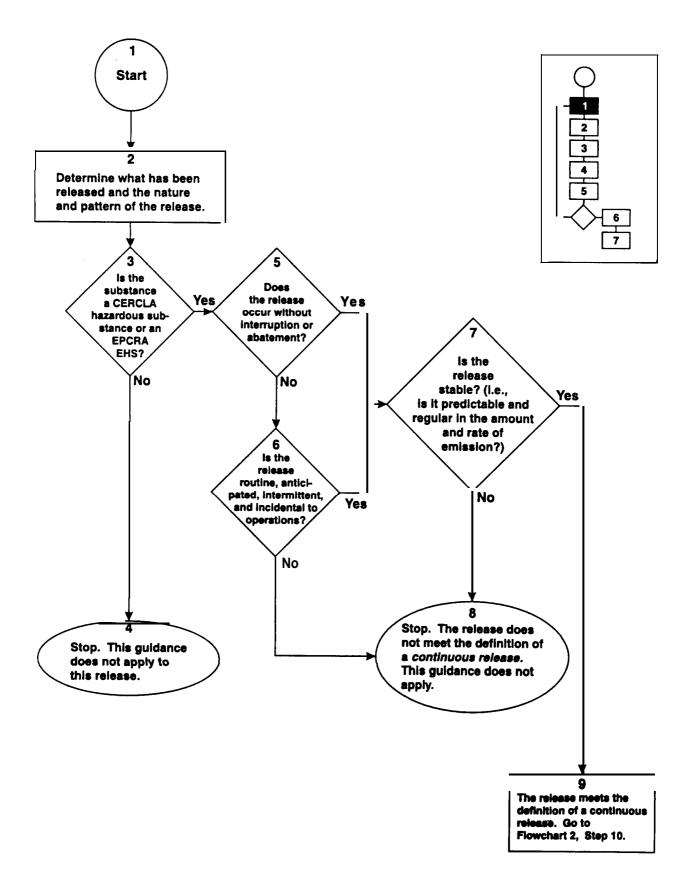
<sup>7 40</sup> CFR 302.8(b).

<sup>8</sup> ibid.

<sup>9</sup> CERCLA Section 103(f)(2)(B).

<sup>10</sup> Initial notifications to the NRC and local authorities (see flowchart 2) generally satisfy the requirement of Sect. 103(f) (2)(B) that a release be reported for a period sufficient to establish its continuity and stability (55 FR 30172-30173).

Flowchart 1. Determining whether a release is continuous.



- Step 1 Start.
- Step 2 It is essential for the person in charge to determine the substance(s) released, the release rate, the source of the release, and the duration of the release. This person must also determine if the release has already been reported as an episodic release under CERCLA Section 103(a) [as opposed to a continuous release under Section 103(f)(2)].
- **Step 3**40 CFR 302.4, Table 302.4, lists all of the CERCLA hazardous substances. If the substance(s) released does not appear on this list and is not a characteristic waste under RCRA (see section 1.2 above), CERCLA does not require reporting of the release.

40 CFR Part 355 Appendices A and B list the EPCRA extremely hazardous substances (EHSs). If the released substance(s) does not appear either on these lists or in 40 CFR 302.4, reports to the State and local authorities are not required by EPCRA.

- **Step 4** Self explanatory.
- Step 5 Continuous releases include releases that occur without interruption or abatement. For example, continuous releases may include radon released from a stockpile of ore or an uninterrupted discharge of a hazardous substance from a pipe or lagoon.
- Step 6 Continuous releases include releases that are routine, anticipated, intermittent, and incidental to normal operations or treatment processes. For example, continuous releases may occur predictably as a result of starting-up or shutting-down machinery on a routine schedule, filling a tank on a periodic basis, or running a batch process.
- Step 7 If the criteria for either Step 5 or Step 6 are met, then determine if the release is stable. *Stable* is defined as predictable and regular in amount and rate of emission. Note that *stable* does not necessarily mean that the release must occur at a fixed rate. The rate of release, however, must be predictable. For example, continuous releases may occur from pressurized systems that decrease or increase at a predictable rate.
- **Step 8** If neither Step 5, Step 6, nor Step 7 applies to the release, then it does not meet the regulatory definition of a *continuous release*, and this guidance does not apply.
- **Step 9** Self explanatory.

<sup>11</sup> A release is considered *continuous* if it occurs without interruption or abatement, or if it is routine, anticipated, intermittent, and incidental to normal operations or treatment processes. Although this is the regulatory definition of the **word** continuous [40 CFR 302.8(b)], the **phrase** continuous release incorporates the additional requirement that the release be "stable in quantity and rate" (step 7).

# 2.0 Determining the Regulatory Status of a Continuous Release

### 2.1 Introduction

Once a release has been identified as a continuous release, it is necessary to determine whether the amount being released equals or exceeds the reportable quantity (RQ) for that substance. Only releases that equal or exceed the RQ over a 24-hour period must be reported under CERCLA or EPCRA.

#### 2.2. What Is an RQ?

An RQ is the amount of a hazardous substance that triggers the reporting requirements under CERCLA or EPCRA. The RQs for all specifically designated CERCLA hazardous substances are found in 40 CFR 302.4. A *statutory* RQ of one pound was established under CERCLA Section 102(b), except for those hazardous substances whose RQs had already been established previously under Section 311 of the Clean Water Act (CWA). Section 102(b) of CERCLA also authorized EPA to adjust the statutory RQs through rulemaking. Almost all CERCLA hazardous substances have had adjusted RQs established through regulation.<sup>12</sup>

Because RQs are generally expressed in pounds rather than by concentration, it is important to distinguish between a release of a pure substance (i.e., the substance accounts for the total mass of the release) and a solution in which the substance of concern represents less than the total mass. If the substance is in solution *and its concentration is known*, then the mass of the solution necessary to reach the RQ for the substance may be calculated. For instance, if a solution is ten percent Aroclor by mass and the RQ is one pound, then a release would not have to be reported until ten pounds of the solution have been released within a 24-hour period. In contrast, however, if the concentration of the hazardous substance is not known, then it must be assumed that the entire mass of the release consists of that substance.<sup>13</sup> The Office of Environmental Guidance, RCRA/CERCLA Division (EH-231) developed a computer program called the *RQ-Calculator* to assist in determining whether a release has exceeded the RQ level. [For copies, please contact the Office of Science and Technology Information at (615) 576-1301.]

# 2.3 What Is a Reportable Release?

Release is defined in CERCLA Section 101(22) to include "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment..." CERCLA Section 101(8) defines environment to mean "(A) the navigable waters, the waters of the contiguous zone, and the ocean waters... of the United States..., and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air...." (see section 1.5).

An RQ is the quantity of a hazardous substance released to the environment during a 24-hour period that triggers the reporting requirements under Section 103 of CERCLA and Section 304 of EPCRA. Releases of source, byproduct, or special nuclear material under authorities granted by the Atomic Energy Act (AEA) or the Uranium Mill Tailings Radiation Control Act

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<sup>12</sup> See 50 FR 13456, 51 FR 34534, 54 FR 22524, 54 FR 33418, 54 FR 33426, and 57 FR 20014.

<sup>13 40</sup> CFR 302.6(b), Releases of mixtures or solutions.

(UMTRCA) and *federally-permitted* releases are *excluded* from the CERCLA reporting requirements. <sup>14</sup>

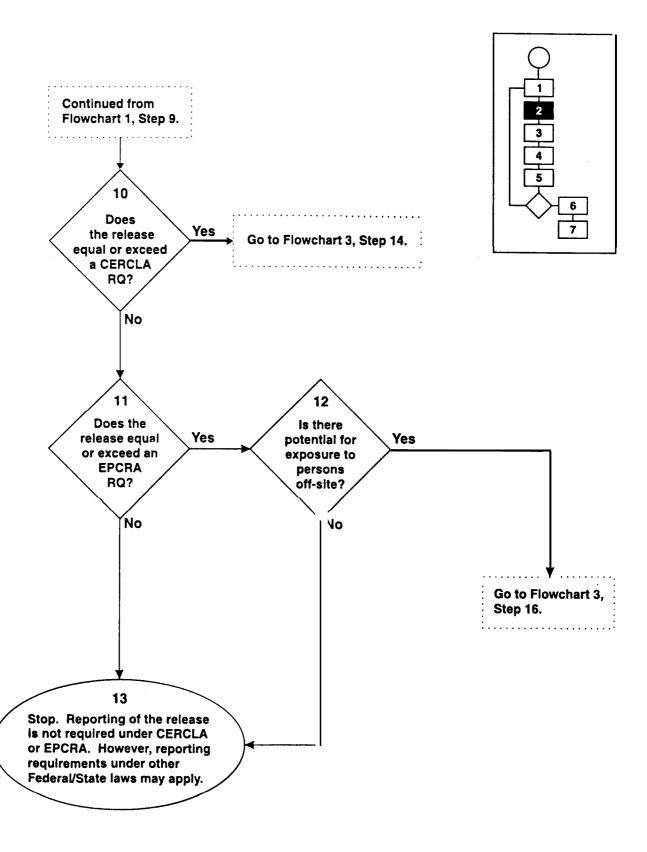
While the definition of *release* under EPCRA is the same as under CERCLA, the conditions under which a release is reportable under the two statutes are different. EPCRA is concerned primarily with *emergency responses* to hazardous substance or extremely hazardous substance releases that pose a risk to the health and safety of local communities. Unlike CERCLA, EPCRA *only* regulates releases that have the potential to migrate off-site. Thus, if a release that equals or exceeds an RQ within a 24-hour period enters the environment, but does not have the potential to migrate off-site (i.e., the determination of no migration off-site has been well documented), then the release does not have to be reported to the SERC or LEPC but should be reported to the NRC. If the release does have the potential to migrate off-site, then the SERCs and LEPCs as well as the NRC should be notified. Finally, EPCRA does not require reporting to the NRC of releases that are EPCRA EHSs but not also CERCLA HSs.

## 2.4 Flowchart 2

Flowchart 2 addresses the regulatory status of a continuous release.

<sup>14</sup> CERCLA Section 101(22) and 103.

Flowchart 2. Determining regulatory status of the release.



To determine if the release of an HS equaled or exceeded its RQ over a 24-hour period, check the list of substances at 40 CFR 302.4. Table 302.4 includes the RQs for each CERCLA hazardous substance, expressed in pounds. Depending on the substance, the RQ may be as little as one pound or as much as 5,000 pounds. Radionuclide and their respective RQs, expressed in curies, are listed in Appendix B to 40 CFR 302.4. Radionuclide RQs range between 0.001 and 1,000 curies.

If the substance is not listed but is a RCRA characteristic waste (i.e., it exhibits any of the characteristics of reactivity, corrosivity, ignitability, or toxicity) before or after the release, then it is also regulated under CERCLA. The default RQ for RCRA characteristic wastes is 100 pounds. (Note: For RCRA wastes that are characteristically hazardous by toxicity the RQ is based on the toxic constituent. For example, the RQ for a waste containing benzene is 10 pounds. The RQ for toxicity characteristic wastes applies to the waste itself, not merely the toxic constituent.)

- Step 11 Check 40 CFR 355 Appendices A and B to see if the quantity released equals or exceeds an EHS RQ. Note that if a substance is both a CERCLA hazardous substance and an EPCRA EHS, the same RQ applies to both reporting requirements.
- 40 CFR 355.40 excludes EHS releases from the emergency release notification provisions of EPCRA for any release that "results in exposure to persons solely within the boundaries of the facility." However, time should not be wasted in making the determination whether off-site exposure is possible. In most cases potential off-site exposure should be assumed. [Consider as an example the release into open air of a volatile organic compound (VOC). While the source of the release may be well contained, the portion that volatilizes could very easily migrate off-site.]
- Step 13 If the released substance is neither a CERCLA hazardous substance nor an EPCRA EHS, if the quantity released is less than an RQ, or if the release was not into the environment, then the release need not be reported under CERCLA or EPCRA. However, other Federal or State statutes and regulations may apply to the release. Contact the EPA Regional Office and State regulators to determine whether the release must be reported under other laws.

# 3.0 Making Initial Telephone Reports

### 3.1 Introduction

Sections 103(a) and (b) of CERCLA require that the "person in charge" of a facility or vessel from which a hazardous substance has been released into the environment in a quantity equal to or greater than its RQ within a 24-hour period immediately notify, by telephone, the NRC in Washington, DC. The toll-free telephone number is 1-800-424-8802 [the Washington, DC metropolitan area number is (202) 267-2675]. Also, releases of hazardous substances, as well as releases of EHSs that are not hazardous substances, that equal or exceed an RQ within a 24-hour period must be reported to any SERC and LEPC likely to be affected by the release. In addition, DOE has internal reporting requirements that include Facility Staff, Facility Managers, Facility Representatives, Program Managers, and Program Secretarial Officers. The requirements can be found in DOE Orders 5000.3B, 5500.1B, 5500.2B, 5500.3A, and 5500.10. This guidance *does not describe DOE's internal reporting requirements*, For information on these requirements, contact your Emergency Operations Office.

# 3.2 What Is a Facility?

A *facility* is defined in Section 101(9) of CERCLA to include any building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft *or* any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located. There may be a number of facilities at one site.

The definition of *facility* under EPCRA differs from that under CERCLA. Under EPCRA Section 329(4), a *facility* is defined as *all* buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites that are owned and controlled by the same person.

The definition of *facility* under EPCRA is broader because it was primarily established with the EPCRA Section 302 and 303 planning requirements in mind. For *emergency response* planning purposes it is important to consider whether the EHS is stored in multiple buildings at a given site and for *release reporting purposes*, it is important to consider whether the EHS was released from one building or in small amounts from several buildings.

A waste site is considered a facility under CERCLA; therefore, a release from a waste site into surrounding environmental media would be a release from a facility into the environment, and would be subject to CERCLA and EPCRA notification requirements. Such releases, however, may not have to be reported on a per-occurrence basis; rather, reports maybe made under the continuous release reporting regulation so long as the release falls within the regulatory definitions of *continuous* and *stable*. Thus, regardless of whether releases occur pursuant to "approved" remediation activity (e.g., activities performed under a signed Record of Decision or Federal Facility Agreement), those releases are technically considered reportable releases under CERCLA and/or EPCRA if they equal or exceed an RQ and, in the case of EPCRA, have the potential to migrate off-site.

<sup>15 40</sup> CFR 355.40(b)(1).

# 3.3 Who Should Telephone the NRC, SERC, and LEPC about a Reportable Release?

CERCLA requires the *person in charge* of the facility to immediately report a release of a hazardous substance to the NRC if that release equals or exceeds an RQ. EPCRA requires the *owner or operator* of the facility to immediately report releases of hazardous substances or EHSs that equal or exceed an RQ to the SERC and LEPC for any area likely to be affected by the release. Generally, the DOE Facility Manager will be the person responsible for ensuring that the NRC, SERC, and LEPC are notified by telephone. Facility staff and operators who are aware that there has been a release of a CERCLA hazardous substance or an EPCRA EHS should immediately notify the Facility Manager of the release and take any steps necessary to abate the release and stabilize the facility. The DOE Facility Manager is then responsible for determining whether the release is reportable under CERCLA and EPCRA and if so, for notifying the NRC, SERC, and LEPC. The Facility Manager must also report such releases as occurrences under DOE Order 5000.3B, *Occurrence Reporting and Processing of Operations Information*.

# 3.4 What Purpose Is Served by the Initial Telephone Calls to the NRC and Local Authorities?

The purpose of the initial telephone call to the NRC is three-fold:

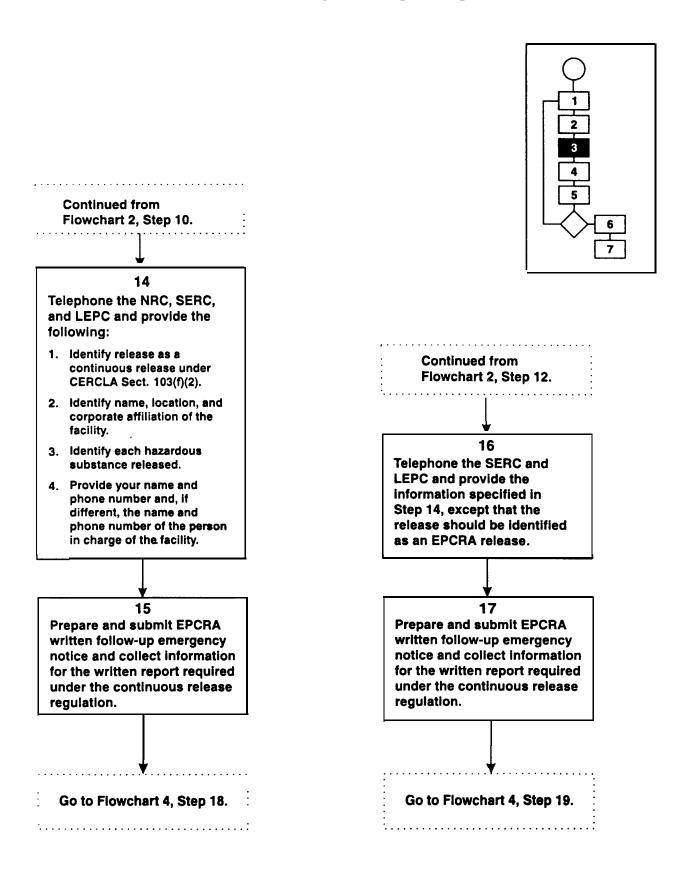
- □ First, the initial call satisfies the statutory requirements in CERCLA Section 103(f)(2) that continuous releases of hazardous substances be reported to the NRC for "a period sufficient to establish the continuity and stability of the release."
   □ The second purpose of the initial telephone call is to alert the NRC, who will notify the
- appropriate EPA Region that the reported release exceeds an RQ in a manner that is continuous and stable, and that the Region should expect to receive a written report within 30 days from DOE describing the release.
- ☐ Finally, the initial telephone call allows the NRC to assign a number to the continuous release report, This case number, called a CR-ERNS number, is needed for all subsequent correspondence regarding the continuous release.

An initial telephone call is also made to the LEPC and SERC of any area likely to be affected by the release. This call alerts the local authorities and, in turn, the community, to any potential risk to health and safety posed by the release.

### 3.5 Flowchart 3

Flowchart 3 describes the initial telephone notification.

Flowchart 3. Making initial telephone reports.



To establish a release as continuous under CERCLA Section 103(f)(2), the person in charge of the facility must telephone the NRC at least once and must provide the NRC with the information presented in this step on Flowchart 3. The telephone number for the NRC is (800) 424-8802. In the Washington DC metropolitan area the telephone number is (202) 267-2675.

The NRC creates a case number for the report, called the CR-ERNS number. This number serves as a reference for all future reports and communications.

The LEPC and the SERC must also be notified immediately if there is a reportable release of a CERCLA hazardous substance. The addresses and telephone numbers of the LEPCs and SERCs can be obtained from the EPCRA information hotline at (800) 535-0202.

- EPCRA Section 304 also requires a written follow-up emergency notice to the SERC and LEPC. As soon as practicable after a release of the hazardous substance or EHS in amounts equal to or exceeding an RQ, the Facility Manager must provide a written follow-up emergency notice updating the information previously provided in the oral notification. The notice must include additional information with respect to: (1) actions taken to respond to and contain the release; (2) any known or anticipated acute or chronic health risks associated with the release; and (3) where appropriate, advice regarding medical attention necessary for exposed individuals.<sup>16</sup>
- Step 16 If there is a release of an EPCRA EHS in an amount that equals or exceeds an RQ, and for which there is the potential for off-site exposure, that release must be reported immediately by telephone to the SERC and LEPC for any area likely to be affected by the release.
- Step 17 Under EPCRA, a written follow-up notice must be sent to the SERC and LEPC as soon as practicable. (see Step 15 above)

<sup>16 40</sup> CFR 355.40(b)(3).

# 4.0 Making Initial Written Reports

### 4.1 Introduction

Within 30 days of telephone notification, the appropriate EPA Region, SERC, and LEPC must be notified in writing about the continuous release. The report must provide sufficient information about the release to enable government response officials to determine if the release qualifies as a continuous release and to identify potential risks associated with the *normal range* of the release. This written report is different and separate from the follow-up written emergency notice required under EPCRA. (see the discussion under Step 15 in Chapter 3)

# 4.2 What Is the Normal Range?

A *normal range* of a release is defined to contain all releases (in pounds) of a hazardous substance reported or occurring over any 24-hour period under normal operating conditions during the preceding year.<sup>17</sup> This definition applies both to conventional hazardous substances and radionuclide, except that for the latter, the unit of measure is the curie, or the becquerel. Only releases that are both continuous and stable in quantity and rate may be included in the normal range. Information on the normal range must be provided in the initial written notification and in the follow-up report, which is submitted one year later. (see Chapter 7) Information on the normal range and upper bound of the release does not have to be the result of direct measurement; the operating history of the facility or vessel, knowledge of the operating processes, any currently available data, and the professional judgment of the person in charge can substitute for measurements, provided these alternatives have a sound technical basis.<sup>18</sup>

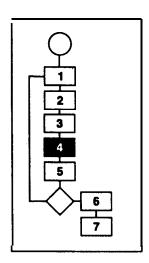
#### 4.3 Flowchart 4

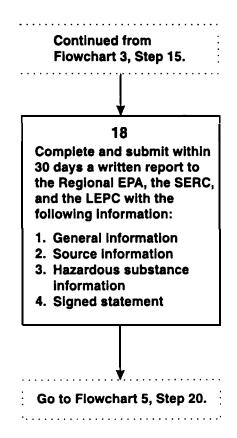
Flowchart 4 describes the initial written notification. The most convenient way of properly submitting written notification is to use the CR-ERNS software package discussed in the introduction to this guidance. Also, all of the information required for proper notification is presented in Flowchart 4. EHSs that are not also CERCLA hazardous substances are not in the CR-ERNS database. Therefore, they must be reported in a written format, providing the same information as is required using the CR-ERNS diskette.

<sup>17 40</sup> CFR 302.8(b).

<sup>18</sup> Reporting Requirements for Continuous Releases of Hazardous Substance A Guide for Facilities and Vessels on Compliance, U.S. EPA Office of Emergency and Remedial Response, OSWER Directive 9360.7-01, October 1990.

Flowchart 4a. Making initial written reports.





A written report about a continuous release of a CERCLA hazardous substance Step 18 must be sent to the appropriate EPA Region, the SERC, and the LEPC, within 30 days of the initial telephone notification, As mentioned, the most convenient way to prepare the written report is through EPA's CR-ERNS software package. It provides a data entry form for all written notifications in the continuous release reporting process. The information required in the initial written notification is presented below. A copy of the reporting format is included in the appendix to this guidance.

## Gei

| General information   |  |  |
|---|--|--|
|   | Name of facility or vessel;  |  |
|   | the location, including longitude and latitude;  |  |
|   | the case number assigned by the NRC (CR-ERNS number);  |  |
|   | the Dun and Bradstreet number of the facility, if available;   |  |
|   | the port of registration of the vessel, if appropriate;  |  |
|   | the name and telephone number of the person in charge of the facility or vessel;   |  |
|   | the population density within a one-mile radius of the facility or vessel, described in terms of the ranges 0-50 persons, 51-100 persons, 101-500 persons, 501-1,000 persons, or more than 1,000 persons; and          |  |
|   | the identity and location of any sensitive populations or ecosystems within a one-mile radius of the facility or vessel.   |  |
| Sour  | ce information   |  |
|   | The source of the release (e.g., valves, pump seals, storage tanks, vents, or stacks). If the release is from a stack, the height of the stack; if the release is from a surface area, the area of the release source. |  |
| ☐ The environmental medium (media) affected by the release: |  |  |
|   | • if surface water, the name of the surface water body;  |  |
|   | • if a stream, the stream order or average flowrate and designated use;  |  |
|   | • if a lake, the surface area (in acres) and average depth (in feet or meters); or   |  |

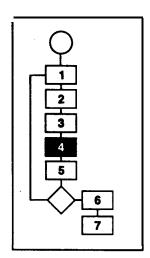
## Hazardous Substance Information

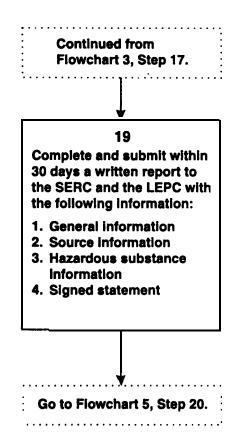
within two miles.

| ☐ The name/identity of the hazardous substance;                        |  |  |
|--|--|--|
| ☐ the Chemical Abstracts Service Registry Number for the substance;    |  |  |
| if the substance is a mixture, the components of the mixture and their |  |  |
| approximate concentrations and quantities, by weight;                  |  |  |

• if on or under ground, the location of public water supply wells

Flowchart 4b. Making initial written reports.





the upper and lower bounds of the normal range of the release over the previous year (see Section 4.2 for a discussion on estimating these values);
 the frequency of the release and the fraction of the release from each release source and the specific period over which it occurs;
 a brief statement describing the basis for stating that the release is continuous and stable in quantity and rate; and
 an estimate of the total amount that was released in the previous year.

## Signed Statement

☐ A signed statement that the hazardous substance release(s) described is continuous and stable in quantity and rate and that all submitted information is accurate to the best knowledge of the person in charge.

### The addresses and telephone numbers for the ten EPA Regions are:

| EPA Region I Toxic Substances Control Section 60 Westview Street New England Regional Lab Lexington, MA 02173 (617) 565-3744 | EPA Region VI<br>Emergency Response Branch<br>1445 Ross Ave., 9th Floor<br>Dallas, TX 75202<br>(214) 655-6444      |
|--|--|
| EPA Region II Response and Prevention Branch 2890 Woodbridge Ave. Building 209 Edison, NJ 08837 (908) 321-6656               | EPA Region VII Emergency Response and Spill Branch 25 Funston Road Kansas City, KS 66115 (91 3) 236-3881           |
| EPA Region III<br>Superfund Removal Branch<br>841 Chestnut Street (3HW-30)<br>Philadelphia, PA 19107<br>(215) 597-0992       | EPA Region VIII Emergency Response Branch One Denver Place 999 18th St. (8 HWN-ER) Denver, CO 80202 (303) 294-7534 |
| EPA Region' IV Title III Section 345 Courtland Street, NE Atlanta, GA 30365 (404) 347-1033                                   | EPA Region IX Emergency Response Branch 75 Hawthorne Street (H-8-3) San Francisco, CA 94105 (41 5) 744-2296        |
| EPA Region V Emergency & Remedial Response Section 230 South Dearborn Street Chicago, IL 60604 (312) 353-2000                | EPA Region X Superfund Response and Investigation Section 1200 6th Ave. Seattle, WA 98101 (206) 442-1196           |

When submitting the written report to the SERC and LEPC, include information specified in Step 18 above. The addresses and telephone numbers of the LEPCs and SERCs can be obtained from the EPCRA information hotline at (800) 535-0202.

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# 5.0 Reporting Changes in the Continuous Release

### 5.1 Introduction

If the continuous release changes in a noticeable way or if previously submitted information about the facility changes (e.g., the Facility Manager is replaced), then additional notification requirements apply.

## 5.2 Must Continuous Releases Be Monitored?

EPA does not require that continuous releases be monitored. However, the reports submitted to EPA, the SERC, and the LEPC must contain the most accurate information available about the release. If information previously submitted in the written report changes, the person in charge of the facility (e.g., the Facility Manager) must comply with additional notification requirements.

# 5.3 How Should Changes in the Source or Composition of a Release Be Reported?

If equipment modifications or process changes occur which result in a change in the source or composition of a previously reported continuous release, the modified release must be reported to the NRC, SERC, and LEPC as if it were a new release. If there is a sound technical basis for asserting that the new release is also continuous, then the reporting requirements start again from the beginning (Chapter 1, Step 1). The changed or "new" release may pose a hazard warranting notification and 'evaluation and must be re-evaluated for reporting under the continuous release reporting regulation. When reporting a change in the source or composition of a previously reported continuous release, include the previously assigned CR-ERNS Case Number when submitting the new written reports. (see Chapters 3 and 4)

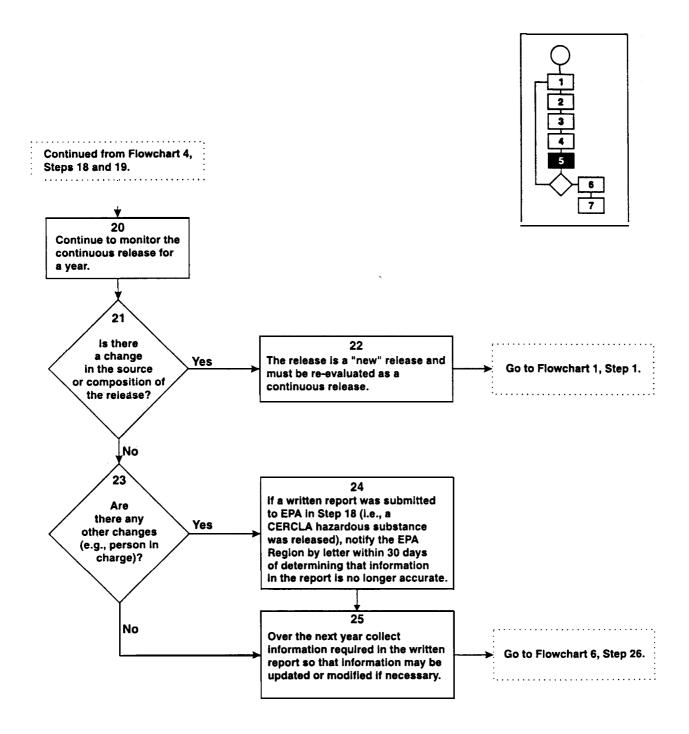
# 5.4 How Should other Changes in the Continuous Release Information Be Reported?

If there is any other kind of change in information previously submitted to EPA (e.g., change in personnel or change in the normal range of the release), the person in charge of the facility (generally, the Facility Manager) must notify the appropriate EPA Regional Office by letter within 30 days after determining that the information previously submitted is no longer accurate. For example, a determination maybe made that the normal range of the release was inaccurately reported (e.g., the upper bound of the normal range may have been established at a level that is too high or too low). If this is the case, simply notify the EPA Region by letter. Such notifications do not have to be made to the SERC and LEPC, although a copy to them may be appreciated. Chapter 6 discusses the special case of statistically significant increases (SSIs) in a continuous release; these changes are significantly different from the source/composition changes and the routine changes discussed in this chapter.

#### 5.5 Flowchart 5

Flowchart 5 describes what actions must be taken when a change occurs in the release that alters the information submitted in the written notification.

Flowchart 5. Reporting changes in the continuous release.



- After the written notification has been submitted, no further reporting is required, although the facility continues to release (he CERCLA hazardous substance or EPCRA EHS in amounts that equal or exceed an RQ. However, even if EPA does not require monitoring, owners/operators should have sufficient knowledge of the release to determine if there is a change in the release.
- Prompt notification of changes must be made to EPA. The EPA rule mentions two types of changes that require notification: (1) changes in the source or composition of the release and (2) changes in other reported information (e.g., the normal range of the release). 19,20
- Step 22 If there is a change in the source or composition of the release, the release is considered new. The reporting process must begin again at Flowchart 1, Step 1. This report, starting with the initial telephone notification, should commence immediately upon discovery of the change.
- Steps 23, 24 If a written report was submitted to EPA in Step 18 (i.e., a continuous release of a CERCLA hazardous substance has been established) and there is a change in the information contained in that report other than a change in the source or composition of the release, then the person in charge of the facility or vessel must provide written notification of the change to the appropriate EPA Region within 30 days of determining that the previously submitted information is no longer accurate. The notification must also include the reason for the change and the basis for stating that the release is continuous and stable under the changed conditions. SERCs and LEPCs do not need to be notified about the changed information.
- After one year a follow-up report must be submitted (Flowchart 7, Step 31). The report requires updated information on the normal range and the upper bound of the release. It is necessary, therefore, to gather information over the year following the initial telephone notification.

<sup>19 55</sup> FR 30187.

<sup>20</sup> Reporting Requirements for Continuous Releases of Hazardous Substances; A Guide for Facilities and Vessels on Compliance, U.S. EPA Office of Emergency and Remedial Response, OSWER Directive 9360.7-01, October 1990.

### 6.0 Reporting Statistically Significant Increases

### 6.1 Introduction

If a change in a release results in an increase in *quantity above the normal range* that was reported in the initial written notification, the change is considered a statistically significant increase (SSI) and must be reported immediately by telephone to the NRC, the SERC, and the LEPC. Notification must include the same information required for an episodic release under CERCLA Section 103(a). A follow-up written report on the SSI must also be sent to the SERC and LEPC as soon as practicable.<sup>21</sup> An SSI is treated exactly the same as any other episodic release, except that the reporting trigger is no longer the RQ, but the upper bound of the normal range of the release.

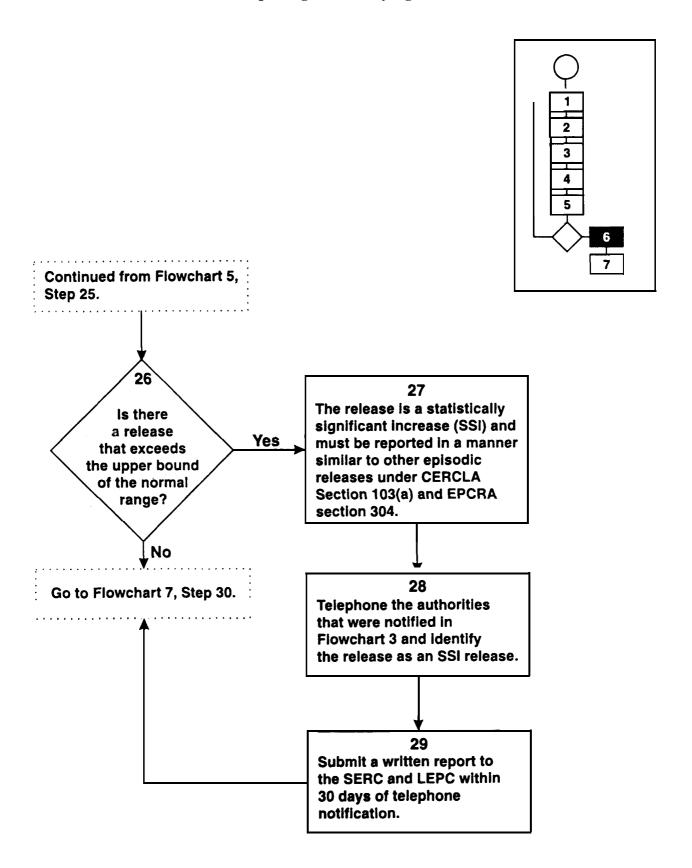
If a release at a facility frequently exceeds the upper bound of the normal range, the reported normal range may be modified instead of reporting each SSI. To modify the normal range of a continuous release, notify the appropriate EPA Region in writing specifying the new normal range. In the written notification, the reason for the change and the basis for believing that the release is still a continuous release (i.e., it still satisfies the definitions of *continuous* and *stable in quantity and rate*) must be explained. Before modifying the normal range of the release, however, at least one release event must be reported to the NRC, SERC, and LEPC as an SSI.

#### 6.2 Flowchart 6

Flowchart 6 describes SSIs and how to report them.

<sup>21 40</sup> CFR 355.40(b).

Flowchart 6. Reporting statistically significant increases.



- **Steps 26, 27** If after written notification, the release increases in quantity such that it exceeds the upper bound of the normal range, the release is considered an SSI and must be reported as if it were an episodic release.
- Step 28 Immediately upon discovery of the SSI, the person in charge must telephone the NRC at (800) 424-8802, or in Washington DC, (202) 267-2675, the SERC, and the LEPC. He or she must provide the CR-ERNS number and all of the information required under Section 103(a) for an episodic release report. An SSI is an episodic release, not a continuous release.
- As soon as practicable after a release of an SSI, the Facility Manager must send a written follow-up notice to the SERC and LEPC, as required under EPCRA Section 304 updating the information previously provided in the oral notification. It must include additional information with respect to: (1) actions taken to respond to and contain the release; (2) any known or anticipated acute or chronic health risks associated with the release; and (3) where appropriate, advice regarding medical attention necessary for exposed individuals.<sup>22</sup>

If the facility experiences several SSIs within a relatively short period, a decision may be made by the Facility Manager to raise the upper bound of the normal range of the release. To do this, the Facility Manager writes to the appropriate EPA Region describing the new normal range, the reason for the change, and the basis for stating that the release in the increased amount is continuous and stable in quantity and rate.<sup>23</sup>

<sup>22 40</sup> CFR 355.40(b)(3).

<sup>23 40</sup> CFR 302.8(g)(2) (ii).

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## 7.0 Submitting Follow-up Reports

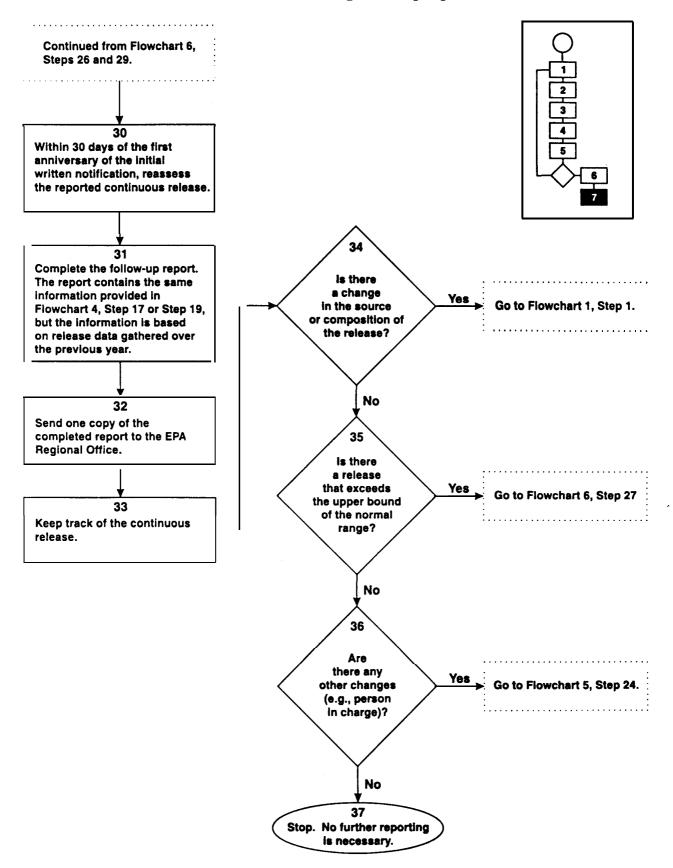
### 7.1 Introduction

Information supporting the claim of a continuous release must be kept on file, and a written follow-up report must be submitted to the EPA Regional Office within 30 days of the first anniversary of the initial written notification. This report should substantiate the normal range of the release using data gathered over the year, the basis for claiming it as a continuous release, and the information included in the initial written report (Chapter 3). Because EPA may question the basis of any of this documentation, it is important to keep these reports thorough and accurate. After submitting the follow-up written report, no further reporting is required so long as there is no change in the release (e.g., no change in the source, composition, or normal range).

### 7.1 Flowchart 7

Flowchart 7 describes how and when to submit follow-up reports.

Flowchart 7. Submitting follow-up reports.



- Step 30 Within 30 days of the first anniversary of the initial written notification, the reported continuous release must be reassessed to determine if changes have occurred in the information submitted in the initial written notification or any change notification.
- Step 31 The information required in the follow-up report is identical to that in the initial written notification (Flowchart 4, Step 18), but the new information should be based on data collected during the previous year.
- **Step 32** The follow-up written report must be sent to the appropriate EPA Region. No report needs to be sent to the SERC or LEPC.
- Step 33 No further reporting is necessary unless there is a change in the information included in the follow-up report.
- **Step 34** If there is a change in the source or composition of the release, the release is considered new, and the reporting process must restart at Flowchart 1, Step 1.
- Step 35 If the release increases in quantity such that it exceeds the upper bound of the normal range, the release is considered an SSI and must be reported as if it were an episodic release. Go to Flowchart 6, Step 27.
- **Step 36** If there are any other changes, go to Flowchart 5, Step 23.
- No further reporting is necessary if there are no changes that would modify the information previously submitted. However, annual evaluations of each hazardous substance continuous release must be conducted to determine if changes have occurred. If there are changes, the EPA Region must be notified and the reporting process must resume at the appropriate point on Flowchart 7.

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# Appendix. Sample Reporting Format for the Initial Written and Follow-up Reports.

On the following five pages are reproductions of the sample reporting format for the initial and follow-up reports.

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| SECTION                                       | N I: GENERAL INFORMATION   CR-ERNS Number:  |
|---|---|
|   | Report: Indicate below the type of report you are submitting.  Written Notification   |
| If this report Adding                         | rt is a written notification of a change in the source or composition of a release, indicate below the type of change g a source Deleting a source previously Modifying the list of hazardous substances or mixture reported reported released from a previously reported source  |
| quantity and i                                | tatement: I certify that the hazardous substance releases described herein are continuous and stable in rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate to the best of my knowledge.   |
|   | Name and Position   |
|   | Date Signature  |
| Part A. Fa                                    | acility or Vessel Information   |
| Name of Fa                                    | Facility or Vessel  |
| n Charge                                      | Name of Person In Charge (last name, first name) Position   |
| •   | Telephone No. ( ) Alternate Telephone No. ( )   |
| Facility<br>Address                           | Street County   |
| Address                                       | City State Zip Code   |
| Dun and B                                     | Bradstreet Number for Facility  |
| Vessel Port                                   | t of Registration   |
| Facility/<br>Vessel<br>Location               | Latitude       Deg       Min       Sec         Longitude       Deg       Min       Sec  |
|   | opulation Information   |
| Population<br>Density                         |   |
| Sensitive<br>Populations<br>and<br>Ecosystems | of your facility or vessel.   |
| CR-ERNS nu                                    | s substance releases from separate, contiguous, or adjacent facilities are included in this report, one un<br>number will represent the entire site report. In this situation, however, releases of the same hazardous<br>from different facilities on the site will be evaluated by EPA as if they were released from a single facility. |

| SECTION II: | SOURCE             |
|-------------|--------------------|
|             | <b>INFORMATION</b> |

| CV-CV142 Millimber | CR- | ERNS | Number |
|--------------------|-----|------|--------|
|--------------------|-----|------|--------|

# Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate

For each source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information:

| Name of Source:   |  |
|---|--|
| 1. Indicate whether the release from  | m this source is either: continuous without interruption or routine, anticipated, intermittent   |
| 2a. Identify the activity(ies) that resu                                    | ults in the release from this source (e.g., batch process, filling of a storage tank).   |
|   | function, describe the malfunction and explain why the release from the red continuous and stable in quantity and rate.*   |
|   |  |
| 3. Identify below how you establishe Past release dataEngineering estimates | ed the pattern of the release and calculated release estimates. Your knowledge of the facility/vessel's Other (explain) operations and release history Your best professional judgment |

<sup>\*</sup> Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.

SECTION II: SOURCE INFORMATION (continued)

| CR-ERNS | Number |
|---------|--------|
|         |        |

| Name  | $\circ f$ | So    | urce. |
|-------|-----------|-------|-------|
| ranic | ()1       | . )() | uice. |

### Part B: Specific Information on the Source:

For the source identified above, provide the following information. If the information requested below is not applicable to the identified source, please write "NA" in the blanks provided.

**AFFECTED MEDIUM.** Identify the environmental medium (i.e., air, surface water, soil, or ground water) 'that is affected by the release from this source. ii the medium affected is air, please also specify whether the source is a stack or a ground-based area source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), complete Section II, Parts A, B, and C, of this format for each medium affected.

| <b>◊</b> Air (stackarea)   |                     |                         |                                |  |  |
|--|---------------------|-------------------------|--------------------------------|--|--|
| Identified Source  | Required Informati  | on                      |                                |  |  |
| • Stack  | Stack height:       | feet or meters          |                                |  |  |
| Area (e.g., Waste Pile, Landfill,<br>Valves, Tank Vents, Pump Seals  |                     | ea of release source:   | _ square feet or square meters |  |  |
| Surface Water  |                     |                         |                                |  |  |
| • If the release affects any surface v   | ater body, give the | name of the water body, |                                |  |  |
|  |                     |                         |                                |  |  |
| • If the release affects a stream, give the stream order or average flow rate, in cubic feet per second.           |                     |                         |                                |  |  |
| stream order:  | or                  | average flow rate:      | cubic feet/second              |  |  |
| · If the release affects a lake, give the surface area of the lake in acres and the average depth in meters.       |                     |                         |                                |  |  |
| surface area of lake:  | acres and           | average depth of lake:  | meters                         |  |  |
| Soil or Ground Water   |                     |                         |                                |  |  |
| • If the release is on or under ground, give the location of any water wells within a two-mile radius of the site. |                     |                         |                                |  |  |
|  |                     |                         |                                |  |  |
|  |                     |                         |                                |  |  |

### **Optional Information**

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. If this information is not provided, EPA will make conservative assumptions about the appropriate values. Please note that the units specified below are suggested units. You may use other units: however, be certain that the units are clearly identified.

| <ul> <li>For a stack release to air, provide the following<br/>information, if available:</li> </ul> |                   |                  |  |  |
|--|-------------------|------------------|--|--|
|  | Inside Diameter   | feet or meters   |  |  |
|  | Gas Exit Velocity | meters/second or |  |  |

meters/second or feet/second

Gas Temperature \_\_\_\_\_ degrees Kelvin, Celsius, or Farenheit

 For a release to surface water, provide the following information, if available:

Average Velocity \_\_\_\_\_ feet/second of Surface Water

# **CR-ERNS Number** SECTION II: SOURCE INFORMATION (continued) Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source Identified in Part B of Section II Name of Source: List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of the Guide.) Number Normal Range **Total Annual** of Releases **Months During Which** (in lbs. or kg)" **Quanity Released** (per year) the Release Occurs Name of Hazardous Substance CASRN# Upper Bound **Lower Bound** (in lbs. or kg)\*

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of the Guide.)

Normal Range of **Total Annual Normal Range of Mixture** Name of **Hazardous Substance Quantity of Mixture** (in lbs. or kg)\* Number Hazardous **Months During** Components (in lbs. or kg)\* Released Upper of Releases Lower Which the Substance Upper Lower Weight (in lbs. or kq)\* **Bound Bound** (per year) **Bound Release Occurs** Name of Mixture Components **Bound CASRN # Percentage** 

<sup>\*</sup> Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.

| SECTION III: | <b>HAZARDOUS</b>   |
|--------------|--------------------|
|              | SUBSTANCE          |
|              | <b>INFORMATION</b> |

| CR-E | RNS | Nur | nber |
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### Calculation of the SSI Trigger

List each hazardous substance or hazardous substance component of a mixture from each source for which you report release quantities in Section II, Part C. For an example of how to complete this section, refer to Table 3 of the Guide.

Name of Hazardous Substance:

To calculate the SSI trigger (i. e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across, all sources Identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

SSI Trigger (specify lbs, kg, or Ci)

SSI trigger for this hazardous substance release:

This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger, as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.